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### People Use Self-Control to Risk Personal Harm: An Intra-Interpersonal Dilemma

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#### **Abstract**

People will smoke cigarettes, drink alcohol, binge eat, drink coffee, eat chili peppers, fail tests, steal, ingest illicit drugs, engage in violent and sadistic actions including killing, have sex, and seek to become HIV positive for the sake of interpersonal acceptance. The self-control for personal harm model reconceptualizes behaviors that have both urge and control components as demonstrating either successful or failed self-control, depending on the incipient urge. The model underscores the role of expected social rewards as an important incentive for which people sometimes engage in personally risky and aversive behaviors despite feeling that they would rather avoid the behaviors and attendant harm. Research from diverse perspectives converges to show that risky behaviors, which might on the surface appear to be self-control failures, can in fact require self-control exertion.

#### **Keywords**

interpersonal relationships, social acceptance, self-regulation, self-control, risky behaviors, self-destructive behaviors, rejection

Alcohol consumption, overeating, smoking, gambling, and impulsive spending are canonical examples of domains in which impulse control is difficult and in which disinhibition results in problematic outcomes. Although these behaviors do at times represent failed self-regulation, in other cases they might represent self-regulation attempts. We propose a *self-control for personal harm* model, which states that the desire to be socially accepted can lead people to strategically enact self-harming behaviors aimed at meeting this goal, using self-control as the process for doing so. We further propose that a meaningful proportion of ill-advised behaviors that are normatively coded as self-regulation failures are in fact self-regulation attempts with the goal of interpersonal inclusion.

We do not take issue with the evidence that exerting self-control frequently leads to outcomes that are good for the self (e.g., Baumeister, Heatherton, & Tice, 1994; Fishbach & Trope, 2005; W. Mischel, Shoda, & Peake, 1988; Tangney, Baumeister, & Boone, 2004). Nonetheless we challenge the view that acquiescence to a self-gratifying impulse is the only way that self-control can lead to behaviors typically labeled as failures of self-control. We contend that some actions commonly labeled as self-control failures might have been carried out as strategic means of reaching a goal (i.e., they were acts of self-control). Often, that goal is social gain. In short, we argue that some seemingly disinhibited acts or unwise choices begin as plans designed to increase the odds of interpersonal acceptance, even if the behaviors come at a cost to the self.

To differentiate a self-control failure from self-control exertion, we first situate our view of self-control in the context of the self-control literature and clarify the distinction between self-control and impulses. We discuss the self-control dilemma posed when intrapersonal and interpersonal goals conflict and consider motivation models of risky acts to illuminate why someone would enact a behavior that could bring self-harm, particularly if self-control is needed to do so. Crucially, we evaluate and discuss evidence of whether people will exert self-control to harm themselves for social gain. Behaviors that are normatively understood as disinhibited, unwise, or unhealthy (e.g., overeating, overspending, abusive drinking, tobacco use, violence, gambling) are referred to as risky because they have the potential to bring personal harm to the self.

Distinct Roles for Impulses and Control in Understanding Behavior. Self-control refers to the process of overriding, stopping, modifying, or otherwise changing an incipient or undesired response (Vohs & Baumeister, 2004), a definition that presumes the presence of a goal. Most models of self-control

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emphasize positive outcomes. Individual differences in trait levels of self-control positively predict the experience of many good life outcomes and the absence of negative life outcomes (e.g., Cooper, Wood, Orcutt, & Albino, 2003; Tangney et al., 2004). State models of self-control focus on its use in discrete events. For example, the test-operate-test-exit (TOTE) model of self-control (Carver & Scheier, 1981, 1990) proposes that people move themselves from a current state to a desired endpoint in the so-called operation phrase, during which responses and behaviors are altered to align with the desired end state.

The limited resource model of self-control elaborated on the TOTE model's *operate* function, proposing that the self-control resources required to alter behavior toward a goal are limited (Baumeister, Bratslavsky, Muraven, & Tice, 1998; Baumeister, Vohs, & Tice, 2007). It is assumed in the extant literature that self-control used to achieve healthful goals that are beneficial to the self and that self-control failures result in maladaptive behavior (e.g., Schmeichel & Baumeister, 2004). We argue against these assumptions by contending that self-control can be and sometimes is used to execute unhealthy, risky, and self-harmful behaviors.

The identification and resolution model of self-control (Myrseth & Fishbach, 2009) centers on viewing a temptation as conflicting with another goal. To the extent that people code the consumption of a double-chocolate donut as antithetical to their goal of losing weight, they will be likely to use self-control to avoid eating it. We contrast this example with a differently framed conflict. An apparent temptation might not in fact be tempting to the individual (e.g., the person does not like donuts), but the individual might view failure to partake in the alleged temptation as conflicting with the higher order goal of social acceptance (e.g., when everyone else is gorging on donuts). In short, what can appear to an outsider to be a self-control failure nonetheless can be successful self-control exertion to the actor.

Is misregulation really amiss? The concept of misregulation has been proffered to denote attempts at self-regulation that result in self-harm, and the phenomenon is considered to be a form of self-regulatory failure (Baumeister et al., 1994; Baumeister & Heatherton, 1996; Carver & Scheier, 1981, 1990). The term is reserved for circumstances in which apparent self-regulation ultimately results in failure. For example, the little girl who brushes her teeth so vigorously that she wears down her gums and consequently worsens (not improves) her dental hygiene would be said to be engaging in misregulation. A common example of misregulation from the literature is when people prioritize reducing personal distress even when there is a job to do (Tice, Bratslavsky, & Baumeister, 2001).

The concept of misregulation centers around the idea that self-regulation is successful only when the goal it serves has clear and positive consequences for personal health and well-being. This construct however conflates the process and outcome of self-control. People who misregulate are certainly exerting self-control but lack an optimal strategy or target. Accordingly, misregulation is by definition not a failure to exert self-control—and hence not a self-control failure—because the individual is exerting controlled effort. The self-control for personal harm model recognizes instances of misregulation as examples of self-control, albeit misguided ones.

The critical role of the often-invisible impulse. An impulse is a situation-specific desire to enact or avoid particular responses or behaviors (Baker, Japuntich, Hogle, McCarthy, & Curtin, 2006; Baumeister et al., 1994). It is distinct from motivations and traits, which are broader and more general concepts. For example, hunger is a global motivation to engage in any number of behaviors, whereas an impulse is a specific urge to grab another three cookies from the jar and eat them. Self-control is used to govern specific impulses and therefore avoid performing unwanted behaviors (Hofmann, Friese, & Strack, 2009; Vohs & Baumeister, 2004). The nature of the impulse is vital in determining whether self-control was used for a given action, yet its typical invisibility may have led previous researchers to overlook this crucial construct.

Self-control can be exerted in different ways, depending on whether the initial impulse is to approach or avoid a behavior. Perhaps the most obvious type of incipient response is an impulse to perform a particular behavior (i.e., an approach impulse). Yet self-control is also the process used to override repellent impulses that signal to the person to avoid behaviors they perceive to be uncomfortable, risky, or otherwise distasteful. When the initial impulse is to avoid an undesirable behavior, then engaging in good self-control means overcoming that feeling of distastefulness and impelling oneself to perform the behavior to attain a goal. For example, an impulse to flee may arise instinctually on hiking in close range of a growling grizzly bear; self-control would require one to follow expert advice to stay put, speak calmly, and pull out the pepper spray (Cameron, 2005). In the interpersonal milieu, a terrified adolescent called out to fight a peer may exert self-control to overcome the impulse to back down in the face of a stronger, more experienced opponent. In a parallel fashion, we argue that people possess impulses to avoid behaviors that do not portend health-promoting outcomes (e.g., binge drinking, cigarette smoking) for they are accompanied by discomfort or might result in harm to self.

Disentangling self-control processes from outcomes. Self-control is a purely psychological process, visible only in the traces that it leaves. Being an internal process means that what represents an act of self-control may be particularly susceptible to misinterpretation. Precisely because incipient impulses and control over them are difficult to observe, the process of self-control has been conflated with its outcomes.

One cannot judge whether any action—self-harming or otherwise—resulted from self-control exertion or self-control failure without knowing the nature of the incipient impulse toward that behavior (i.e., whether the person initially wanted to approach or avoid; see also Hofmann et al., 2009; Hofmann, Friese, & Wiers, 2008). In our conceptual framework, there are two distinct processes leading to any action: those in which a person's impulse was positive and he or she merely acquiesced to that urge (i.e., did not exert self-control) and those in which a person's impulse was negative or simply uninterested but he or she exerted self-control to do it anyway. In the context of risky behaviors, the literature has largely focused on the former cases, which document selfcontrol failure. The current article's focus is on the latter cases wherein self-control is engaged toward ends that threaten personal harm.

The question then arises, are prototypical self-control failures (as normatively labeled) sometimes perceived to be objectionable by the actor? It might surprise some readers that the answer is yes. Research has shown that frequently people possess an initially aversive reaction toward actions that are otherwise normatively viewed as self-control failures. For instance, the literature on self-control has identified alcohol use as a self-control failure (e.g., Baumeister et al., 1994; Tangney et al., 2004)—yet most people find their first sips of beer to be bitter and unpleasant (Fallon & Rozin, 1983). Nonetheless, people overcome the impulse to spit out the bitter brew and, over time, acquire a liking for it. Thus, forcing oneself to drink beer when it (initially) evokes a repulsive reaction satisfies the definition of engaging in selfcontrol. In essence, people can and do use self-control toward untoward ends.

Yet some people immediately enjoy the taste of beer. For them, anticipating social (or other) rewards is unnecessary to get them to drink beer: The action is rewarding already. However, many people find that first sip of beer (and other potentially risky actions described later) to be aversive. Conflating the process of self-control with the nature of the resulting outcomes misses the possibility that sometimes people use self-control to be able to perform risky actions when there was no incipient appetite to try them. As seen later in the evidence section, these instances might be more common than readers realize.

Separating the outcomes from the process of exerting self-control is crucial to our argument that people can exert self-control to perform personally risky behaviors in the service of social (or other) goals. Breaking a diet might appear to be a failure of self-regulation. At times, it certainly is a self-regulation failure (Vohs & Heatherton, 2000). At other times, though, the undesired implications of caloric overindulgence might be an unpleasant side effect of attempting to achieve a different goal, such as forging interpersonal bonds by joining a communal binge (Crandall, 1988). This idea is at the heart of the self-control for personal harm model:

Competing goals can be served by what appears to be self-control failure (Polivy, 1996).

Interpersonal Goals Can Conflict With Personal Well-Being. Given that there are considerable costs to engaging in self-control (Baumeister et al., 1998; Schmeichel, Vohs, & Baumeister, 2003), people are unlikely to exert such effort unless it appears worthwhile from their perspective. Stated plainly, people exert self-control to achieve valued goals. Those valued goals can be meaningful to the personal self or can go toward building interpersonal relationships. Scholarly examinations of the types of goals people possess mostly have emphasized the former (cf. Vohs & Finkel, 2006). Commonly discussed goals in the literature go to satisfying intrapersonal needs, wants, and desires, such as obtaining hedonic rewards (e.g., marshmallows for children; H. N. Mischel & Mischel, 1983), career success (Trope & Pomerantz, 1998), and physical health (Hofmann et al., 2008, 2009; Sheeran & Orbell, 2000; Trope & Fishbach, 2000). Fishbach, Friedman, and Kruglanski (2003) contrasted "high priority goals" such as studying, work, moral goodness, watching one's weight, and sexual fidelity with "ephemeral, lowpriority enticements" such as playing basketball, doing drugs, sinning, eating fattening foods, and having sex (p. 297). Such a strong emphasis in the literature on intrapersonal goals, though, has the potential to eclipse the notion that many goals are aimed at gaining or maintaining interpersonal relationships.

It seems counterintuitive to suggest that people would force themselves to overcome an urge that putatively is there to protect them from potential harm. If one assumes that all self-control is exerted in the interest of achieving long-term intrapersonal well-being, this suggestion is nonsensical. Yet there are many reasons why people would force themselves to commit self-harming actions, despite their aversions. People might exert self-control to put themselves in harm's way to prove to themselves that they possess inner strength. On other occasions, though, the promise of social rewards can be ample motivation to override aversion to self-harm. Much research and theory have focused on the power of twinned motivations to gain social inclusion (Baumeister & Leary, 1995; van Beest & Williams, 2006) and avoid social rejection (Maner, DeWall, Baumeister, & Schaller, 2007; Warburton, Williams, & Cairns, 2006). Our model, therefore, emphasizes social rewards as key to understanding why people would exert self-control toward untoward ends.

There is a growing recognition of the importance of self-control for achieving interpersonal goals (e.g., Finkel et al., 2006; Fitzsimons & Finkel, 2010, in press; Vohs, Baumeister, & Ciarocco, 2005; Vohs & Finkel, 2006). Achieving social goals is crucially important to survival and might have been the impetus for the development of self-control in the first place (Heatherton & Vohs, 1998). Some empirical research has studied self-control in the interpersonal milieu. Children

will work at a tedious task to benefit a close friend but not as much for an unknown child (Kanfer, Stifter, & Morris, 1981). People use self-control with the hopes of having smooth interactions with uncoordinated teammates (Finkel et al., 2006) and when having to cope with an unfamiliar self-presentational demand (e.g., boasting to friends; Vohs et al., 2005). Hence, self-control is used to achieve interpersonal goals. In the current article, we argue that self-control is sometimes used to achieve interpersonal goals even when the goal-directed action evinces a cost to the self.

Goals are often in conflict (Emmons & King, 1988; Fishbach et al., 2003). We argue that a common crossroads involves a clashing of the desire to do deeds that are good for the self (e.g., be healthy, make wise choices) with the desire to be socially included (or avoid rejection and ostracism)—which at times involves actions that risk personal harm. Faced with such an intra-interpersonal dilemma, a person might do the normatively good thing and exert self-control to achieve healthy, moral, law-abiding, and other types of good-for-you goals. In other cases, however, a person might want desperately to fit in with others and, at least temporarily, cast aside intrapersonal goals with an eye toward social rewards.

Thus far, we have framed this dilemma in terms of longterm social versus personal goal attainment. However, people generally have difficulty transcending the current environment to orient toward distal goals (W. Mischel et al., 1988; Suddendorf & Busby, 2003; Vohs & Schmeichel, 2003). To attain remote goals, people implement a variety of strategies that encourage them to get through temporary strains (Ariely & Wertenbroch, 2002; Fishbach & Trope, 2005; Gollwitzer, 1993; Gollwitzer & Brandstätter, 1997; Myrseth & Fishbach, 2009). In the moment, then, people may be faced with the conflict between feeling averse to the behavior and also yearning for social acceptance, both of which have consequences that could be realized almost immediately. Given the recent surge in data on people's deeply held motivation to secure social inclusion and ward off rejection (e.g., Eisenberger, Lieberman, & Williams, 2003; Patton et al., 2006), it may be that the most powerful incentive for exerting self-control to do something risky is to expect an imminent social reward (or social punishment for not doing it, e.g., imminent rejection; Mead, Baumeister, Stillman, Rawn, & Vohs, 2010). To the extent that the actor views social acceptance as worth enduring the anticipated risks from the behavior, we predict that people will exert the requisite self-control to overcome that aversion and enact the behavior. To overcome greater anticipated risks, greater amounts of self-control will be needed.

It really is a two-sided coin. Smoking cigarettes, using alcohol, gambling, overspending, overeating, and breaking laws became lore in the annals of self-control failures for two reasons. Simply put, frequently they are self-control failures and frequently they make the person worse off. The

first reason is a base-rate argument: In the large majority of instances, people engaging in these behaviors probably are acquiescing to urges that compel them to enact the behavior. Smokers crave cigarettes, partiers desire martinis, and ne'erdo-wells long to cross the line. Frequency-wise, then, when people smoke, drink, or burgle, it might reflect an inner desire. The second is the fact that those acquiesced-to behaviors can stunt personal goal achievement, such as losing weight, staying financially solvent, being productive, and protecting against sexually transmitted infections (Baumeister et al., 1994; W. Mischel & Ayduk, 2004; Vohs & Faber, 2007). That is, even when there are no social rewards to be had (or there are social costs to performing the behavior) people will smoke, overeat, and overspend because it is what they feel like doing at the moment and they are giving in to that impulse (viz., failing at self-control).

Yet we object to wholesale assumptions that such personally risky behaviors solely evince self-control failure. Instead, consider that those same behaviors serve interpersonal goals as well. Consuming food, drinking alcohol, avoiding work, shopping, and sexual activity often take place with companions. Therefore, people might perform these actions to secure interpersonal ties or achieve social harmony. To the extent that these behaviors are repellent to some, then those people would need self-control to engage in them. Self-control is sometimes used for personal harm.

Why Would People Exert Self-Control for Personal Harm? Insights From Motivation Models. Research on the motivations behind risky behaviors long has highlighted the importance of the social context (e.g., Cox & Klinger, 1988; Leary, Tchividjian, & Kraxberger, 1994). We propose that, in these literatures, self-control is the process mediating social acceptance motives and consequent risky behaviors. Consistent with these motivational literatures, we do not believe that social rewards are the only reason why someone may engage in risky acts, nor that self-control exertion is the only process through which those acts are executed. But we draw on motives work to fuel our argument that people will go to great lengths to obtain social rewards. Given that there are ingrained aversions to many risky behaviors (see evidence section below) and that these behaviors can sometimes allow a person access to a social group, our model focuses on selfcontrol for personal harm when people have their eyes set on interpersonal gain.

Motives for risky behavior. The risky behavior literature long has considered social rewards as important incentives for engaging in such acts (Cooper, 1994; Cox & Klinger, 1988). From this perspective, two dimensions underlie risk-taking behavior, approach versus avoidance urges and self versus social focus, which when combined yield four goals that are the motivational landscape for many risky acts: conforming to others' perceived expectations (i.e., avoid social rejection), having fun in social contexts (i.e., approach social

inclusion), coping with negative emotions (i.e., avoid personal negative emotions), and boosting positive emotions (i.e., approach personal positive emotions; Cooper, 1994; Cox & Klinger, 1988). This model was developed to predict motivations to consume alcohol, and subsequent work has successfully applied this model to other risky domains (e.g., hazardous sexual behavior: Cooper, Shapiro, & Powers, 1998; marijuana smoking: Comeau, Stewart, & Loba, 2001).

The risky consumption literature has studied the frequency with which people are attracted to perilous behaviors because they seek to earn interpersonal benefits or avoid interpersonal losses. The former is much more common than the latter (Cooper, 1994). More people report imbibing to rejoice with others than to dodge exclusion (Cooper, 1994), and a parallel finding has been found for engaging in sex acts (Cooper et al., 1998; Impett, Peplau, & Gable, 2005). Given this difference, we anticipate that the more common pattern is for people to exert self-control to override an impulse to avoid an action the more that they value the social benefits they anticipate gleaning. This situation is more likely to occur than engaging in a potentially harmful act to avoid being disliked.

Although the power of social motives to predict risky behavior has been well established, the mechanism through which these motives result in behavior has remained unspecified. Whenever a person dislikes or finds uncomfortable a risky act, we propose that self-control will be the mechanism that enables people to push past these feelings and engage in it to pursue interpersonal inclusion or avoid interpersonal exclusion.<sup>2</sup>

Impression management. The impression management literature offers further evidence that behaviors that place the self in harm's way are enacted strategically for social gain. People put much time and effort into cultivating particular impressions of themselves in the minds of valued others (Leary & Kowalski, 1990). One report calculated that people spend more than 3 hours every day managing the impressions they leave on others (Leary, Nezlek, et al., 1994). According to the two-component model of impression management, people who are motivated to self-present engage in a variety of tactical decisions (consciously and nonconsciously) to determine the image that would be most advantageous for others to hold of them as well as how to go about creating that impression (Leary & Kowalski, 1990).

Later work illustrated that impression management motives can encourage behaviors that jeopardize health and well-being (Leary & Jones, 2006; Leary, Tchividjian, et al., 1994; Martin & Leary, 1999). According to a review, some of the personally risky behaviors enacted for impression management purposes include neglecting to use condoms, skin tanning, over- and undereating, drug and alcohol use, reckless behavior, failure to exercise, cosmetics that clog pores, and face and body enhancement surgery (Leary, Tchividjian, et al., 1994). For example, people will tan when

they believe it will enhance their attractiveness to others (Leary & Jones, 2006).

There is no corresponding literature indicating that tanning or some of the other acts listed (e.g., cosmetics use) is an aversive experience. The current model predicts that to the extent that some people experience any of those behaviors as aversive (e.g., those who dislike sweating in a stinky, glass tanning bed), they would need to exert self-control to perform them—and would do so to the extent that they prize the social rewards that come, for instance, from having tanned skin. As we review later, research on many of the other personally damaging acts listed by Leary, Tchividjian, et al. (1994; e.g., drug and alcohol use, unprotected sex) does suggest that at least some people feel aversions to them, thereby hinting at the notion that self-control is implicated in these personally harmful acts.

The Self-Control for Personal Harm Model. Self-control has several ingredients, from choosing a target to correcting responses and behaviors to assessing progress. The present model centers on the process of self-control—amending, self-stopping, and substituting (Vohs & Baumeister, 2004)—which is highlighted in the "operate" phase of Carver and Scheier's (1981, 1990) TOTE model, Mischel's ideas on delay of gratification (H. N. Mischel & Mischel 1983), and the limited resource model of self-control (Baumeister et al., 1998; Baumeister et al., 2007). Alternative models of self-control emphasize the strategies used to achieve goals (e.g., Higgins, 1996; Locke & Latham, 1990; van Hook & Higgins, 1988; Wicklund & Duval, 1971), which are undoubtedly important components of positive goal attainment. However, by pointedly emphasizing self-control as the process through which some self-harming behaviors occur, we view the exertion of self-control as distinct from the soundness of its outcomes. Self-control that results in self-harm is still self-control.

Self-control is a viable mediating mechanism through which risky behaviors are, at least sometimes, enacted particularly when social benefits are foreseen. The idea that risky acts are enacted for social profit is not a new one. However, the idea that self-control can be put toward behaviors that are personally detrimental is new and is bolstered by the motivation literatures (e.g., Cooper, 1994; Leary, Tchividjian, et al., 1994). Our model advances the literature on impression management and risky behaviors generally by proposing self-control as a mechanism through which people enact risky behaviors. We predict that to the extent a risky behavior is a deliberate action, it will require self-control exertion. The current model also advances the self-control literature by incorporating the motivation literature. We emphasize potentially risky and self-harmful domains because it is in these domains that the self-control literature has most conflated the process of self-control with its outcomes. Moreover, it is via these potentially risky behavioral domains that a thorough understanding of the underlying processes could have the greatest applied benefit, in terms of preventing some of the harmful outcomes to the self.

To evaluate our thesis, we examined research on diverse risky domains, including alcohol consumption, tobacco use, unsafe sex, and murder. We found most definite evidence that people do engage in these self-harming acts for social gain and suggestive evidence that self-control is exerted in the process. Nonetheless, specific and directed research is needed to test the *self-control for personal harm* hypothesis in its fullness.

## Evidence That People Exert Self-Control When Engaging in Personally Costly Behaviors to Promote Social Success

This section reviews evidence indicating that people can and do override self-protective impulses when social rewards are at stake. We drew support from a variety of risky behaviors that range in their potential harm to the self from embarrassment to contracting a deadly illness. Many of these domains have large literatures associated with them; in this review, we selected research that reasonably suggested that there was some element of self-control exertion.

Tobacco and Alcohol: Overview. In multiple surveys, people have identified beer and other bitter alcoholic beverages as initially distasteful (Fallon & Rozin, 1983; Moore & Weiss, 1995). Similarly, first-time users of tobacco report that it tastes unpleasant (DiFranza et al., 2004). Hence, we infer that most people exert self-control when first ingesting alcohol and tobacco. Furthermore, it appears that they do so in response to potential social rewards. People experiment with tobacco and alcohol because they perceive such trial substance use as prevalent within their peer group and their initial attempts often model their peers' behavior (Britt & Jachym, 1996; C. Jackson, 1997; Urberg, Degirmencioglu, & Pilgrim, 1997). With repeated exposure, people may acquire tastes for these substances, which at that point might require the exertion of self-control to refrain from consuming them. In line with the self-control for personal harm model, though, is the common thread of expecting social rewards as an inducement for many people to initiate the acquisition process.

*Tobacco*. Even tobacco companies acknowledge that starting to smoke is an awkward, uncomfortable, and physically unpleasant activity (DiFranza et al., 2004; Teague, 1973). One large study (N = 679) found that among people who have tried smoking, 69% said that their first inhalation was a bad experience and 72% said that their first cigarette did not make them want to smoke again (DiFranza et al., 2004). To help potential smokers override the revolting taste of

cigarettes, tobacco companies have added strong flavors such as fruit sensations; "Sweet Cherry," "Happy Hour Bellini," and "Caribbean Peach Rum" are flavors of cigarillos available for purchase (Montana Department of Revenue, 2010). Another frequently added flavor is menthol, which appeals to new smokers because menthol masks the tobacco taste (Hersey et al., 2006). To help would-be Indonesian smokers learn to enjoy cigarettes, approximately 500 brands (including Marlboro) now include cloves as an ingredient (Brummit, 2007). Cloves are a familiar taste in Indonesian cuisine, and so their addition makes cigarettes more palatable. Moreover, cloves numb the throat and make it easy to inhale cigarette smoke.<sup>3</sup>

The existence of tobacco-masking flavors supports the view that tobacco tastes bad and is initially unpleasant to consume. More than just erasing the ill taste, people typically also need social incentives to take up smoking. Before curbs on advertising, tobacco advertisements underscored the social benefits derived from smoking, including projecting the image of a self-confident role model and being of high status among peers (Brandt, 2007; Kessler et al., 1997). A survey in the 1920s on perceptions of smoking revealed that 65% of people smoked because it facilitated social interactions, whereas only 5% smoked because they enjoyed the taste (Bogen, 1929). Decades later, the social connections of smoking remain: The vast majority of adolescents smoke their first cigarette with a friend, not by themselves (Friedman, Lichtenstein, & Biglan, 1985; Hahn et al., 1990), suggesting that social support facilitates initial smoking attempts. People also acknowledge that they smoke because they expect smoking to improve their image among potential friends (Spijkerman, van den Eijnden, & Engels, 2005).

The perception that smoking is a normative behavior within one's peer group is a potent incentive for smoking (Andrews, Hampson, & Barckley, 2008; C. Jackson, 1997), particularly among people who are sensitive to social cues as guides for behavior (Perrine & Aloise-Young, 2004). One longitudinal study tracked children ages 10 to 12 and found that those who were high in self-monitoring (i.e., sensitive and responsive to social factors) and who believed that smoking was common among their peers were more than 3 times as likely to become a smoker within a year than were high self-monitors who did not hold such a belief (Perrine & Aloise-Young, 2004). That is, young adolescents who had a keen desire to engage in impression management started smoking only if they believed smoking would yield social rewards. This finding suggests that adolescents who routinely alter their behavior to match social norms are especially likely to override the aversive taste of cigarettes for interpersonal gain. Without the expectation of social success from smoking, the likelihood of smoking dropped precipitously.

Other research shows that adolescents smoke to be allowed into desirable friendship groups (Aloise-Young, Graham, & Hansen, 1994). In this study, 342 twelve-year-old students

were identified as either group outsiders, who desired entry to a friendship group, or accepted group members. The accepted students nominated their best friend in the group, whereas outsiders nominated a person in the group with whom they desired to be best friends. Outsiders who desired friendship with a smoker were twice as likely to begin smoking during the next year as outsiders who desired friendship with a nonsmoker. More tellingly, though, was the finding that how much the would-be friend smoked during that period predicted how much the outsider smoked. In contrast, accepted group members' smoking was not predicted by how much their best friend within the group smoked. In short, only when trying to gain acceptance to a social group did adolescents override the distaste of smoking and engage in the behavior; moreover, they calibrated their smoking to align with desirable others' cigarette use. Adolescents who were already successful group members had no incentive to alter their smoking behavior, and therefore, their smoking habits were independent of their best friends' smoking. This is precisely the pattern that the self-control for personal harm model would predict.

Furthermore, this study found evidence that group outsiders were rewarded for calibrating their smoking to others' smoking (Aloise-Young et al., 1994). Outsiders who smoked a similar amount as did their desired friend were more than twice as likely (15.2%) to solidify that friendship than were outsiders whose smoking behavior failed to match their desired friend's smoking (6.5%). This study offers strong evidence that adolescents will use cigarettes to gain liking by a desired friend, and this tactic worked to build valued friendships.

In sum, smoking cigarettes for the first time is unpleasant and awkward. Yet people will overcome the noxious taste of cigarettes when they believe it will lead to social rewards such as friendship. Crucially, people smoke only to the extent to which they believe it will lead to social rewards but do not smoke when those rewards are unattractive or absent, again suggesting that taste is not the reason for smoking but rather the goal is being accepted by others. It works, too: Strategic smoking does in fact secure friendships with other smokers. These data support our overall hypothesis: Smoking, a behavior often (and rightly) considered an instance of self-regulatory failure, can require exertion of self-control to occur. People seem to override their initial aversion to the taste of cigarettes to achieve social acceptance.

Alcohol. Because the taste of alcohol often is perceived to be bitter and unpleasant at first (Fallon & Rozin, 1983; Moore & Weiss, 1995), many people need an incentive to acquire this taste. Like cigarette additives, alcoholic beverage manufacturers have found it necessary to add sweet fruit flavors to their beverages to attract so-called "entry-level drinkers" (Mosher & Johnsson, 2005). For example, in New Zealand, chocolate- and fruit-flavored beers have been introduced

specifically to appeal to the young palate (McCreanor, Greenaway, Barnes, Borell, & Gregory, 2005). The existence of these sweetened versions of alcohol implies that alcoholic beverages are not inherently pleasant at first sip. Without additives to mask the taste, there is an impulse to avoid the unpleasant taste that must be overridden to imbibe.

Among both adolescents and adults, anticipating social benefits from drinking is associated with frequency of drinking (Brown, Goldman, & Christiansen, 1985). Similarly, perceptions of social benefits experienced while drinking, such as confidence around others, predict alcohol use (Cooper, 1994; Roehling & Goldman, 1987). A longitudinal study of young adolescents revealed that the extent to which people expect alcohol to ease social interactions predicted increased alcohol consumption (Smith, Goldman, Greenbaum, & Christiansen, 1995). This study tracked adolescents between 11 and 14 years of age over a 2-year period. The more strongly that adolescents believed that they would be socially aided by drinking alcohol, the more likely they were to begin drinking and to consume higher quantities of alcohol during the 2-year period. Hence, in line with our hypothesis, adolescents begin to drink alcohol and drink more alcohol when they expect social profits as a result. Additional findings revealed a pattern of reinforcement that provides insight into how people acquire a taste for alcohol: Expecting to be interpersonally included because of drinking resulted in increased alcohol consumption, which in turn led to stronger expectations of interpersonal rewards from alcohol use in the future. Early expectancies of social gain thus act as self-fulfilling prophecies, leading to more alcohol intake over time.

Motivations for drinking alcohol among college students have been studied from a self-determination theory (SDT) perspective (Knee & Neighbors, 2002). Extrinsic reasons for drinking alcohol were measured using items such as "I drink because most responsible adults drink" and "I drink because I feel uncomfortable if I am the only person not drinking." These items can be interpreted as measuring desires for social rewards or to avoid social rejection, which from the SDT perspective are termed "extrinsic reasons" for engaging in a behavior. Across two samples, results showed that college students who drank alcohol for extrinsic reasons (e.g., to gain status as an adult or avoid social exclusion) also reported heightened peer pressure to drink, which in turn upped alcohol consumption. One notable finding is that the pattern was strongest among men. A possible reason for the gender difference is that almost two thirds of the male participants came from fraternities, which are known for their penchant for drinking and staking social acceptance on extreme behaviors (O'Connor, Cooper, & Thiel, 1996; Wechsler, Dowdall, Davenport, & Castillo, 1995). In sum, Knee and Neighbors's (2002) study provides solid evidence that people consume alcohol because they expect to be socially rewarded for doing so.

More evidence comes from the literature on pluralistic ignorance, which shows that college students who believe that drinking alcohol is commonplace among their peers use alcohol more than those who do not possess that belief (Schroeder & Prentice, 1998). A sample of first-year college undergraduates was randomly assigned to discuss pluralistic ignorance regarding drinking behavior. These students were taught that the belief that "everyone is doing it" (i.e., drinking alcohol) is pervasive yet false. First-year students randomly assigned to a control group discussed decision making in drinking situations, which was also an alcohol-related topic but one that was engineered not to challenge the default belief that drinking is ubiquitous on campus. The following semester, students whose beliefs about the prevalence of drinking had been altered via the pluralistic ignorance discussion reported drinking less than their counterparts in the control condition. This finding exposes the question of students' motivation to drink: If students' drinking had been driven chiefly by personal tastes, then the knowledge that fewer peers were drinking alcohol would not have affected drinking patterns. Yet when the students thought that alcohol consumption was not as prevalent as they once believed, less alcohol was consumed. This result implies that college students in the control group, representing students in general, drink larger amounts of alcohol to conform to drinking norms they perceive on campus.

In sum, research on alcohol consumption supports the overall hypothesis that people will drink alcohol to gain social benefits. As with research on cigarette smoking, none of these studies explicitly measured whether people were averse to the taste of alcohol at the outset, but extant evidence on the initially bitter taste of alcohol suggests that at least some portion of the participants in these studies would have been overriding an aversion to consume alcohol. Many of the studies focused on adolescents because they are (in general) a group who is first experimenting with alcohol use. When combined, the reviewed research suggests that despite the unpleasant taste and potential illness that results from drinking more than one is accustomed to (not to mention the legal difficulties that adolescents risk when they drink before they are of lawful age), when people believe that alcohol will bring social advantages, they try it. Numerous studies have shown that people believe that drinking leads to social benefits, such as confidence and ease in social situations, and the strength of these beliefs predicts whether and how much people imbibe.

Binge Eating. Gastric distension, peptide release, and orosensory signals combine to indicate satiation in humans (Beglinger & Degen, 2006; French & Cecil, 2001). Binge eating involves eating past this point of satiation and overriding physiological stop signals such as painful sensations, suggesting that binge eating requires self-control exertion. Long-term binge eating is related to increased gastric

capacity (Geliebter & Hashim, 2001) and an increased risk of obesity, anxiety disorders, and depression (Reichborn-Kjennerud, Bulik, Sullivan, Tambs, & Harris, 2004). Although chronic binge eating is clinically considered to be a loss of self-control (American Psychiatric Association, 1994), research among university students suggests that fitting in with others might motivate people to strategically binge eat (B. Jackson, Cooper, Mintz, & Albino, 2003).

Binge eating is rewarded with popularity in college sororities (Crandall, 1988). A longitudinal study tracked binge eating behavior in two sororities over the course of a year. From the start, the two sororities had different norms for binge eating. In one sorority, the norm was to binge eat often, whereas in the other, the norm was to binge eat a moderate amount. Women who binged in line with the norms of their sorority became more popular over time as compared with women whose binge eating did not align with the sorority's norms, whose popularity waned over time. At a small group level, a popularity-binge eating link existed too. Within each sorority, friendship subgroups that engaged in binge eating at the normative level for the entire sorority became more popular over time than did friendship subgroups that exhibited deviant bingeing behavior (bingeing more or less than the norm). This study provides convincing evidence that people appear to strategically engage in a behavior that is normatively understood as stemming from a loss of self-control and is known to be dangerous to one's health. In addition, people who tailor their bingeing to that of the crowd are rewarded with popularity for doing so.

Recent research expanding on Crandall's (1988) study makes clearer the point that people binge eat and purge as well to align themselves with desirable others. Undergraduate women self-select into social groups with similar personality profiles as their own, and certain personality patterns predict bulimic tendencies (i.e., low self-esteem, high perfectionism; Vohs, Bardone, Joiner, Abramson, & Heatherton, 1999). Drawing on the personality-bulimia link, researchers found that groups of women who possessed the vulnerable traits of low self-esteem and high perfectionism incited bulimic symptoms in each other (Zalta & Keel, 2006). Crucially, this study also revealed that spending time with group members was the process by which bulimic behavior spread. Over the summer months, when these women were away from most of their university peers, the social rewards for bulimic behavior disappeared, and consequently so did many of the bulimic behaviors. In support of the self-control for personal harm model, women reduced purportedly disinhibited behaviors (bingeing and purging) when there were no social profits for engaging in them. This drop in bingeing and purging suggests that the behaviors were controllable to some extent and furthermore unenjoyable unto themselves, therefore suggesting that an incentive—interpersonal rewards—had impelled those women to engage in it.

Acquired Tastes. Acquired tastes are, by definition, aversive tastes that become pleasurable after repeated exposure, which begs the question, why would people repeatedly expose themselves to unpleasant tastes? We argue that part of the reason that people acquire tastes for aversive and potentially harmful substances such as chili peppers and coffee is because consuming those substances can confer social benefits. Acquiring such tastes is, arguably, not terribly risky. However, these actions fit with our perspective that people will engage in behaviors they find aversive to be liked by others.

Chili peppers. Chili peppers create a noxious burning sensation when placed on the tongue—so much so that they are used in some cultures to wean babies away from mother's milk (Mennella, Turnbull, Ziegler, & Martinez, 2005; Rozin & Schiller, 1980). The compound capsaicin, which gives chili peppers their heat, can cause skin burns, stomach pain, eye irritation, and lung irritation if inhaled (Natural Medicines Comprehensive Database, n.d.). Yet children in some cultures (e.g., Mexico) bear these risks and learn to eat them. Eating chili peppers is perceived to be what adults do and in Mexico indicates a daring personality and masculinity (Rozin & Schiller, 1980).

One study showed that over time schoolchildren increased their liking of foods when the foods were presented to them in combination with praise from or brief conversations with their teachers but not when the foods were presented without social interaction (i.e., when the foods were placed in their lockers; Birch, Zimmerman, & Hind, 1980). Chili peppers are eaten socially in gatherings of respected adults and older children (Rozin & Schiller, 1980), which likely affords the requisite social rewards for acquiring the taste. Acquiring a taste for chili peppers requires overriding a burning sensation in the mouth as well as possible chemical irritations to the mouth and gastrointestinal system. One reason that people—even small children—may force themselves to acquire this taste is for interpersonal approval.

Coffee. Coffee is another acquired taste that can have adverse side effects. The taste of black coffee is bitter and unpleasant (Fallon & Rozin, 1983). One prominent caffeine scientist quipped, "No one ever drank coffee for the first time and said, 'Oh, now this is what I've been missing'" (Griffiths, quoted in Price, 2008, p. 27). Moreover, the caffeine present in coffee can impair sleep quality and quantity (Brezinova, 1974; Pollak & Bright, 2003; Roehrs & Roth, 2008), cause restlessness, nervousness, gastric irritation, tremors (Griffiths, Juliano, & Chausmer, 2003), and, if used frequently, cause withdrawal symptoms including headache, fatigue, and irritability (Juliano & Griffiths, 2004).

When people start drinking coffee, they tend to make it sweeter, which, in a manner similar to the sweeteners for nicotine, serves to counteract bitterness (Yiee, Duffy, & Bartoshuk, 2002). Coffeehouse owners report that instead of drinking black coffee, youth mostly begin drinking highly

sweetened variations, such as mochas (hot chocolate and coffee) and sweet lattes (espresso, milk, and flavored sugar syrup; Rolek, 2004; Teitell, 2007).

Not only is coffee bad tasting and potentially unhealthy, but also its initial consumption seems to be affected by social factors (Rozin, 1987). One study showed that the frequency with which adolescents drink coffee is influenced by their parents' and peers' attitudes toward it (Webster, Hunter, & Keats, 1994). Thus, social influence leads adolescents to adjust their expectations of how coffee will taste, which increases coffee consumption.

In sum, early drinkers of coffee chemically change or psychologically diminish its aversive taste and accept potential negative physical side effects. Whether such coffee consumption is enacted using self-control is not clear from existing data; however, initial consumption seems to be driven by a desire to gain heightened social status.

Sabotaging Intellectual Performance. Some people behave as if they are less intelligent than they are in actuality. This behavior not only is deliberate but also can harm the self. People are averse to giving answers that they know to be factually incorrect, suggesting that behaving as if one is dumb when one is not dumb requires self-control. People who have been instructed to give an incorrect answer to a question but who know the correct answer possess a strong impulse to give the correct answer and must consciously override this urge to provide an answer they know to be erroneous (Sparrow & Wegner, 2006; Wegner, Fuller, & Sparrow, 2003). Despite explicit instructions and strong motivation to do so, people who were told to respond randomly to a series of yes-no questions were more likely to give the correct answer than the wrong answer (Wegner et al., 2003). Even when offered incentives and additional opportunities for responding incorrectly, people found it quite difficult to suppress their knowledge.

From a person perception perspective, research has shown that people are averse to appearing unintelligent and will overrepresent their intelligence if given the opportunity (e.g., when accurate results are unknown by others; Schlenker & Wowra, 2003; Tice, Butler, & Muraven, 1995). Wanting to appear intelligent is particularly important when people want to be viewed positively by others (Paulhus, Harms, Bruce, & Lysy, 2003). Therefore, cultivating an impression that one is relatively unintelligent or simply not performing up to one's abilities requires overriding an accuracy motive as well as the ubiquitous impulse to self-enhance (Sedikides, Skowronski, & Gaertner, 2004).

To be sure, performing intelligently leads to personally beneficial outcomes such as academic and career success. However, intelligent behavior can sometimes have negative social consequences. Social ties can be damaged when one person outperforms another, and people are sensitive to this possibility. Research has demonstrated that people are aware that a relationship strain may result from outperforming valued others (Exline, Single, Lobel, & Geyer, 2004), and the resulting feeling of concern and distress has been labeled sensitivity about being the target of a threatening upward comparison (Exline & Lobel, 1999, 2001). Coupled with the known unpleasantness and difficulty involved in deliberately underperforming (Sedikides et al., 2004; Wegner et al., 2003), distress from outperforming valued others suggests a self-control dilemma that pits intrapersonal accomplishment against interpersonal success.

Underperformance poses a self-regulatory challenge yet can lead to social success. Do people sabotage their own performance to gain favor with others? It seems so. Both men and women report deliberately "playing dumb" to improve their social relationships (Dean, Braito, Powers, & Britton, 1975; Gove, Hughes, & Geerken, 1980). Extending to more than self-report, laboratory tests have demonstrated that people will underperform on a cognitive intelligence test to avoid outperforming a likeable partner—but will not do so for an unlikable partner (P. H. White, Sanbonmatsu, Croyle, & Smittipatana, 2002). In these studies, a naïve participant and a confederate posing as a participant completed the study together. The confederate acted in a likeable or unlikeable manner toward the participant throughout the experiment. Their task was to individually solve anagrams aloud and in the presence of each other. The confederate solved her set of anagrams first and either performed well or poorly. Then, the naïve participant took his or her turn at solving the anagrams aloud. In line with the selfcontrol for personal harm model, participants offered significantly fewer correct anagram solutions—and hence deliberately underperformed—when the likeable confederate had just failed at the same task rather than succeeded. Tellingly, participants excelled at anagram performance when the unlikeable confederate failed, indicating that improving a relationship with the unlikeable confederate was not worth the effort of underperforming. These studies suggest that people will deliberately perform below their ability levels, which is a task that takes controlled processing and is difficult to do (Wegner et al., 2003) to promote interpersonal ties with desirable others.

Delinquency and Drug Use. Delinquency and drug use are risky behaviors that can carry substantial costs to the self. Delinquent behavior, such as theft and vandalism, puts people at risk of developing a criminal record that could land a person in jail or hinder employability. Using illicit drugs carries personal costs such as short- and long-term damage to the physical self (see, e.g., National Institute of Drug Addiction, 2009, on cocaine), financial costs, the possibility of addiction, legal troubles, and various other risks because of impaired judgment while under the influence of illicit substances. Accordingly, drugs are perceived to be dangerous, particularly by nonusers (O'Connor, Fite, Nowlin, & Colder, 2007). Nonusers of marijuana expect more negative effects of

marijuana use (e.g., cognitive and social impairments) than do users (Aarons, Brown, Stice, & Coe, 2001; Linkovich-Kyle & Dunn, 2001). This finding reveals that nonusers indeed recognize the dangers of drug use; yet some nonusers at some point will try drugs. We argue that the expectation of interpersonal success entices people to sample drugs and other delinquent behaviors despite recognition of their potential costs.

Peer pressure is one reason why adolescents engage in delinquent behavior. One quarter of drug users report deliberately encouraging others to use drugs (Voss & Clayton, 1984), and people use drugs in response to this pressure. For example, one study of adolescents ages 12 to 14 found that peer pressure to do drugs predicted drug use more strongly than did other variables, including lax parenting practices (Kung & Farrell, 2000). Another study investigated predictors of a range of delinquent behaviors including theft, cheating, drunk driving, drug use, promiscuous sexual attitudes, and smoking among 16- to 18-year-old teenagers (Santor, Messervey, & Kusumakar, 2000). Each of these risky behaviors and attitudes was predicted by perceived peer pressure as well as a desire for popularity. Based on our theory, we would also predict that these two variables would interact to induce even more extreme delinquency; however, this study did not test interactions. Nonetheless, many of the behaviors surveyed are normatively understood as indicative of low self-control (e.g., drug use, drinking alcohol) and involve costs to the self (e.g., physical and mental health, criminal record). Consistent with our broad hypothesis, these behaviors were enacted in response to a desire to belong.

Although deviance is often enacted by people who are attracted to it (e.g., impulsive people; J. L. White et al., 1994) and in response to peer pressure as noted above, some theories have conceptualized deviance as an interpersonal strategy seen as useful for asserting social status (Brezina, 2000) and for carving out a unique identity among peers (Blanton & Christie, 2003). Deviant behaviors can sometimes result from deliberate action. Seiffge-Krenke (1995) proposed that some people recognize and reject societal norms and expectations for acceptable behavior. Instead, they respond by engaging in deviant acts such as drug use and vandalism. A decision to act in ways that deviate from society suggests self-regulation and accordingly dovetails with our overarching perspective. In support of this notion, longitudinal research examining substance use among adolescents has revealed that late starters (i.e., those who do not try drugs until age 15) exhibit higher behavioral control than do early starters (Wills, McNamara, Vaccaro, & Hirky, 1996). Although correlational, this study suggests that people can engage in drug use despite—or, as we argue, because of—the possession of good self-control.

Further evidence of strategic deviance comes from a study of college students who were new to campus. Incoming freshmen are likely to be more anxious about fitting in and joining social groups than are students who already are

on campus and likely have a group of friends. Hence, people should be more willing to use drugs to build social connections on their arrival at university than after some time experiencing university life. Samples of incoming freshmen and college students already in the midst of their first year reported how much they were concerned with acting in socially appropriate ways as well as their level of and reasons for recreational drug use (i.e., marijuana and alcohol intake; Wolfe, Lennox, & Cutler, 1986). Perceived peer pressure was reported as a primary reason for drug use. People who lacked an established social group and who were quite invested in fitting in (i.e., incoming freshman highly concerned with behaving socially appropriately) were more likely to use drugs when they believed there was social approval for doing so than were those less keen on fitting in (i.e., students in their first year who were unconcerned with behaving socially appropriately and seasoned college students in general). Likewise, other research demonstrates that people who are particularly anxiety prone report drinking alcohol and smoking marijuana for the express purpose of fitting in with others (Comeau et al., 2001). Recent research has confirmed that people who are feeling socially excluded say that they are willing to try cocaine, but only when their friends are around to witness it (Mead et al., 2010). If people imagine trying cocaine left by their friends, albeit who are gone at that moment—meaning that using the drug could not function as an affiliation tool—then they state that they would be significantly less willing to try it. Consistent with the self-control for personal harm model, results from these studies suggest that drug use can be strategic when doing so is expected to be useful for interpersonal rewards.

Socially successful people, as opposed to those who are not as successful, seem to know how to regulate their deviant behavior so that it achieves maximum social gain. Popular adolescents (as nominated by their peers) who perceived that behavioral misconduct was valued by their peers were more likely to engage in those misbehaviors over a 1-year period than were unpopular adolescents who nevertheless held the same perception of peer values (Allen, Porter, McFarland, Marsh, & McElhaney, 2005). Popular adolescents appeared to know their peer group's limits of delinquent behavior and limited their misconduct to acts of minor delinquency that met approval from their peers (e.g., theft of less than \$5, sneaking into a movie). Unpopular adolescents, conversely, misjudged their peers' opinions and instead engaged in serious criminal behavior (e.g., assault) that exceeded their peer group norms. Popular adolescents are more socially skilled than unpopular adolescents (Frentz, Gresham, & Elliott, 1991), so the fact that popular adolescents engaged in any delinquency suggests that they had enough social skills to sense that minor acts of delinquency would not harm their popularity and might bolster it. Conversely, unpopular people's lack of social skills might have rendered them unable to recognize the boundaries of socially appropriate delinquency. Other work also indicates that popular people enact an optimal level of delinquency for obtaining social rewards (Blanton & Christie, 2003) and therefore appear to regulate their behavior to avoid deviating from that optimal level. As such, delinquent behaviors can be strategically managed for social gain.

We have established that delinquent behavior and drug use can be harmful to the self. Moreover, theories of deviance support the notion that self-control exertion can play a role in (i.e., has a positive association with) delinquent behavior, although empirical research mostly has emphasized the role of self-control failure when studying deviance (e.g., Muraven, Pogarsky, & Shmueli, 2006). The fact that research has shown that delinquent behavior occurs in the presence of peer rewards—but not without it—provides indirect evidence for our contention that delinquency can be the result of self-control exertion in the service of social rewards.

Extreme Violence. Killing an organism, even one known or perceived to be adversarial, has been considered a self-control failure (Baumeister, 1997). To wit, most countries outlaw murder, meaning that a law must exist to provide reason for restraint from murderous acts. Not only in theory but also in practice has self-control failure been named a prime cause of mortally violent behavior (Gottfredson & Hirschi, 1990). Yet there is evidence that initial acts of extreme violence, such as killing and raping, are not enjoyed but are in fact repellent to the aggressor.

Documentations of the initial instance of exacting extreme violence on another human being tell of the negativity inherent in the process. Sadists, serial killers, police officers, and combat soldiers alike have been said to loathe the notion of killing and lack a desire to kill (Browning, 1992; Jankowski, 1991; Keegan, 1976; Toch, 1969/1993). For example, during a first killing or raping, many perpetrators reported that it elicited an aversive feeling that psychologists have characterized as disgust (Staub, 1992), and only approximately 5% of perpetrators report finding pleasure in their victims' pain (Groth, 1979). Although there are myriad famous and infamous cases of individuals performing repeated and severe violence, many prototypically violent offenders do not enjoy harming others. One sociologist who lived among gang members for almost a decade acknowledged that some gang members do take pleasure in violence but that they are not the majority. "Only a small number of gang members enjoy fighting. . . . Most do not enjoy fighting at all and try to avoid it" (Jankowski, 1991, p. 177). Yet being aggressive is an important quality for gang members to possess (Campbell, 1987).

Wartime killing, similarly, cannot be indiscriminately labeled as stemming from disinhibition involving giving into urges. A huge uproar after the Second World War came about because of reports that countless soldiers—in fact, the vast majority by some accounts—could not bring themselves to fire at the enemy (Hackworth, 1989). During World War II, U.S. Army Brigadier General S. L. A. Marshall

interviewed men on the front line, and what he found was contrary to many assumptions about men in war (Marshall, 1978). He found that only 15% to 20% of men were willing to use their weapons to fire at the enemy. World War I seemed to have likewise patterns, as did Napoleonic and American Civil War regiments (Griffith, 1989). Other data suggested that only 1% of men accounted for approximately a third of all enemy aircraft destroyed in air combat during World War II (Gabriel, 1986). What accounts for this reticence?

For many, the act of killing another human being takes self-control. It is aversive, disgusting, and deeply disturbing. But for some, the situation calls for them to kill. Brigadier General Marshall, the aforementioned U.S. historian, said that troops felt relief when they moved to a safe area not for their own safety but because it came with "the blessed knowledge that for a time they were not under the compulsion to take life" (Marshall, 1978, p. 79). Grossman, another military historian who compiled many cases of reticence among soldiers to fire on others, noted that a common factor missing from prior analyses of killing in combat is "the simple and demonstrable fact that there is within most men an intense resistance to killing their fellow man" (Grossman, 1995/2009, p. 4). Many American soldiers who carried out the My Lai massacre and killed Vietnamese civilians cried throughout the event and some used their guns to selfinjure rather than be made to kill others (Kelman & Hamilton, 1989). Taking this inquiry to a controlled laboratory setting, social psychologists too have observed that people's initial reaction is a reluctance to kill when afforded the opportunity to do so (Martens, Kosloff, Greenberg, Landau, & Schmader, 2007).

Yet the military counts on soldiers to risk their lives to play a vital cultural role, which is linked to their acceptance by others. Major works on military psychology have emphasized that prior to battle soldiers are scared of being killed or wounded but they are also concerned about being seen as cowardly by their peers (e.g., Holmes, 1970; Keegan, 1976). Their concern with their peers motivates them to fight and take a host of risks. One analyst of military firing (or lack thereof) commented that although they did not want to kill, many soldiers could be compelled into overriding this avoidant urge by becoming aware of their duty to the group and the immediate social pressure of fellow soldiers (Dyer, 1985).

In short, actions that might readily look to be evidence of acquiescing to an urge to aggress against someone who poses a threat in fact seem to require the use of self-control. Gang members and warriors, contrary to stereotypes, mostly do not enjoy being violent. The majority of wartime soldiers who had the opportunity chose not to fire their weapons, as they found the notion of killing another person to be abhorrent (Grossman, 1995/2009). Admittedly, some people inherently find pleasure in harming others, and still

others come to enjoy those acts with time (Baumeister, 1997). Nonetheless, urges that repel a person from inflicting mortal wounds onto another appear to be robust and affecting for many.

Sex. People sometimes engage in sexual activities that they find unpleasant or that carry a risk of personal harm. One reason why people engage in these risky behaviors is because they expect them, rightly or wrongly, to lead to social rewards such as companionship, intimacy, or a desirable social identity. These expectations provide the incentive needed for people to impel themselves to engage in sexual behaviors that they would otherwise avoid. In fact, people who report being motivated to have sex to please their partner and to gain peer approval tend to report few positive personal rewards for being sexual (e.g., enjoyment, sensation seeking; Cooper et al., 1998). Results from this study led researchers to conclude that "the need for social approval (or fear of rejection) appears to be the only dynamic that would propel individuals motivated by these [peer and partner approval] needs toward sex" (Cooper et al., 1998, p. 1540). In the context of our model, we suspect that these people likely exert self-control to have the sex they believe will lead to peer and partner

Consensual unwanted sex occurs when a person who does not want to have sex agrees to it to fulfill his or her partner's desire (Impett & Peplau, 2003). The term itself, consensual unwanted sex, showcases the process of overcoming the urge to avoid a personally undesirable behavior to please another and thus promote interpersonal harmony. Both men and women in short- and long-term relationships report having engaged in consensual unwanted sex (Impett & Peplau, 2003), but longitudinal and recall studies show that more women than men report engaging in it. In fact, the majority of women report engaging in consensual unwanted sex at least some of the time (O'Sullivan & Allgeier, 1998; Sprecher, Hatfield, Cortese, Potapova, & Levitskaya, 1994). This finding is consistent with a literature review of more than 200 published articles that concluded that women on average possess a weaker motivation to obtain sex than do men (Baumeister, Catanese, & Vohs, 2001). Hence, overcoming the urge not to be sexual would be expected to be more prevalent among women than men, in line with findings by Impett and Peplau (2003).

Adolescents sometimes engage in sexual acts that they perceive to be personally harmful or unpleasant to enhance their popularity or encourage a romantic relationship. Adolescent girls who are highly sensitive to rejection report a reluctant willingness to engage in sexual behaviors that they perceive to be morally wrong to maintain a relationship (Purdie & Downey, 2000). This finding strongly suggests that adolescent girls will override an aversion to sexual behaviors to continue a romantic relationship. Furthermore,

25% of adolescent girls in a large sample (N = 425) spontaneously reported that the main reason to engage in oral sex (giving or receiving) was to heighten intimacy in their relationship, whereas boys most frequently cited pleasure as the primary goal of oral sex (Cornell & Halpern-Felsher, 2006; Halpern-Felsher, Cornell, Kropp, & Tschann, 2005). Women report less enjoyment than men for giving and receiving oral sex (especially giving; Laumann, Gagnon, Michael, & Michaels, 1994); accordingly, girls might engage in sex acts that are personally undesirable to reinforce their romantic relationship and boost their social status. Some evidence suggests that adolescents are in fact rewarded with popularity when they engage in sexual behaviors: Self-reported sexual activity predicts peer-nominated popularity among adolescents (Prinstein, Meade, & Cohen, 2003).

A shocking example of subjugating personal well-being for interpersonal connection comes from a small subculture of gay men. Some gay men refer to human immunodeficiency virus (HIV) as the Gift. A small percentage of gay men seek to be infected with HIV; these men are called Bug Chasers. Another group of gay men (again, a small percentage) seek to give HIV to other men; these men are called Gift Givers (Grov & Parsons, 2006; Tewksbury, 2006). Bug Chasers desire to become part of the group, known as the Poz Brotherhood, and Gift Givers seek to initiate new members. Qualitative analyses of online posts revealed that both groups possess an image of becoming HIV positive as something akin to joining a fraternity, with expectations of mutual support and caring to accompany group membership (Graydon, 2007). Some of the Bug Chasers' statements acknowledged the physical danger of acquiring HIV alongside a simultaneous willingness to endure it to attain this identity. These themes suggest that people do not want to acquire HIV yet actively seek it to become part of the Poz Brotherhood. This subculture is small and understudied, yet the pattern of findings is consistent with the self-control for personal harm model: People override an aversion to contracting a potentially lethal virus to gain the social connections that come with an HIV-positive status.

In sum, some people engage in unwanted sexual acts to gain interpersonal rewards such as relationship harmony and desired social identity. Research shows that at times people (especially women) willingly engage in sex to appease relationship partners, despite a lack of personal desire. Adolescent girls expect that interpersonal intimacy follows from oral sex. Other reports suggest that women require selfcontrol to engage in sexual behaviors, particularly oral sex, because of a relatively lower sex drive. Moreover, the existence of the uncommon phenomenon of Bug Chasing among gay men suggests that some people (a small minority) will seek a deadly virus to gain a social identity and its attendant communal support. The compilation of evidence supports the view that people exert self-control to engage in unpleasant and risky sexual behaviors for social reward.

#### **General Discussion**

Theory Summary and Nuances. People will smoke cigarettes, drink alcohol, binge eat, drink coffee, eat chili peppers, fail tests, steal, ingest illicit drugs, engage in violent and murderous actions, have sex, and seek to become HIV positive for the sake of building relationships with others. Critically, research shows that the expectation of social rewards offers a potent incentive for people to engage in these personally risky and aversive behaviors even if they would prefer to avoid the behaviors and attendant harm. Research from a variety of domains and perspectives converges on the notion that people are willing to sacrifice personal well-being, ranging from embarrassment to noxious tastes to HIV-positive status, for connection with and approval from others.

The risky behaviors that we have emphasized are often assumed to result from self-control failure (e.g., Baumeister et al., 1994; Fishbach et al., 2003). This normative way of thinking about risky behaviors requires two assumptions: (a) people have urges that encourage them to engage in risky behaviors and (b) risky behaviors cannot be used to achieve worthwhile and acceptable goals. Yet our investigation revealed that risky behaviors can in fact require self-control exertion, meaning that they are not prima facie evidence of self-control failure. Such exertion is most likely to occur when social acceptance is expected to result from enacting risky acts. For clarification, it is important to unpack some key assumptions of these statements.

There are multiple pathways by which people engage in potentially risky behaviors. One pathway is simply to acquiesce to a desire to engage in it. To be sure, some people enjoy engaging in behaviors that have the potential to bring harm to the self. Many find it enjoyable to drink alcohol, for instance. In contrast, one of the key purposes of this article is to expose a heretofore shadowed pathway by which people engage in such behaviors. By acknowledging variability in people's impulses toward potentially risky behaviors, we expose the possibility that some people exert self-control to engage in them. Considering the self-control process as orthogonal to its outcomes negates the assumption that any behaviors, including potentially risky ones, always result from acquiescing to an appetitive impulse.

One reason why self-control exertion may have been downplayed, if not overlooked entirely, as a pathway in prior thinking (e.g., Baumeister et al., 1994) is because it is common for people to be attracted to potentially risky behaviors. Behaviors such as drinking alcohol, having sex, smoking, overspending, and overeating are often rightly characterized as temptations that require self-control to avoid (Fishbach et al., 2003; Schwarzer, 2001). Yet this need not always be the case. Variability in impulses toward a behavior may be especially apparent when people first consider engaging in an action. Over time, people might develop an appetite for potentially risky behaviors (Haertzen, Kocher, & Miyasato,

1983; Knee & Neighbors, 2002). To the extent that most research on self-control in these domains occurs after people develop a taste for them, research will likely neglect instances when people dislike these behaviors but exert self-control to engage in them.

There are several reasons why a person may override an aversion to a behavior to enact it. One example is that people may expect eventually, through repeated action, to find an action pleasurable (Cooper, 1994). We focused on the promise of social rewards because much research has shown the immense power of affiliation goals to influence behavior (e.g., Baumeister & Leary, 1995; Maner et al., 2007) through self-control exertion (Finkel & Campbell, 2001; Vohs et al., 2005). We proposed that social rewards offer an important incentive—but not the only incentive—for people to override an initial aversion to a behavior.

When Are Social Goals Worth Risking Personal Harm? By definition, risky behaviors can have undesirable consequences. Consequences are typically identified in terms of long-range states (e.g., Baumeister et al., 1994). For our analysis, it is important to notice that many of these behaviors exact costs even shortly after being enacted—costs that hint at suspected benefits. Impulsive spending can result in overdrafts, drinking alcohol can result in work absenteeism, smoking leaves one smelling and tasting bad, and overeating can cause physical discomfort and all-too-quick weight gain. Under what circumstances would these and other personal costs be deemed acceptable?

We propose that people would be most likely to exert selfcontrol to engage in personally risky behaviors when two key conditions are met, and future research is warranted to test these hypotheses. First, a strong desire for acceptance from a specific group or individual is necessary. If there are myriad desirable groups available or if the desire to be a part of one specific group is tepid, then the urgency to engage in selfsacrifice should be less intense than if there is only one highly desirable group available. For example, small rural communities, relative to large urban centers, might consist of few social networks available for a person to join. When there is only one desirable group, belonging to it can be perceived as vital. Likewise, whenever being accepted by a particular group or individual is especially salient (e.g., situational pressures) or is especially strong (e.g., personality traits such as a high need to belong), we would expect people to be increasingly willing to prioritize social gain over personal well-being.

Second, it is necessary for the person to perceive that that risky behavior is a central means of being accepted into the group. If there are myriad ways to gain entry or maintain status in a group, then there is less incentive to overcome aversions to risky behaviors. We predict that when these two preconditions are satisfied, people who have an aversion to a risky behavior will be relatively likely to override that aversion (i.e., activate self-control) and perform the behavior.

If only one precondition is met, then we predict that people who are averse to the risky behavior will be less likely to engage in it than if both preconditions are met. If neither precondition is met, we predict that the behavior will be unlikely to occur because it is aversive and the person lacks an external incentive to perform the behavior.

Implications of the Self-Control for Personal Harm Model. The ideas presented here offer many refinements to current research and theory. We proffer that there is a conceptual distinction between impulses and self-control processes, similar to that which has been highlighted by Hofmann and colleagues (2008, 2009). Yet the Hofmann et al. work consistently discusses impulses as self-gratifying, approach-oriented temptations that necessarily conflict with long-term personal goals (Hofmann et al., 2008, 2009). Throughout their discussion remains the assumption that the course of action served by exerting self-control, regardless of whether one is overriding an approach or an avoidance impulse, always results in long-term health promotion. This assumption, we argue, is misguided because it conceals circumstances in which self-control is enacted and yet causes consequences (see also our discussion of misregulation above).

Another key advance of the self-control for personal harm model is to recast behaviors as successful or failed attempts at self-control based on the actor's intended aims, which may not be apparent to observers (see Monin, Pizarro, & Beer, 2007, for a similar treatment of moral actions as judged by outsiders vs. actors). Much work on goal pursuit emphasizes self-regulatory strategies people use to work toward longterm goals and counteract or avoid temptations that encourage deviation from those goals. For example, people surmount short-term temptations and discomfort to attain long-term goals by setting implementation intentions (i.e., "if . . . , then . . . "behavior contingencies; Gollwitzer, 1993; Gollwitzer & Brandstätter, 1997), self-imposing costly deadlines (i.e., precommitment; Ariely & Wertenbroch, 2002), and proactively boosting the value of enduring the short-term cost (Trope & Fishbach, 2000). However, underlying this research is the assumption that the short-term temptation has no redeeming qualities beyond hedonistic satisfaction. We, however, have argued that some short-term temptations that can undermine a long-term goal could simultaneously serve other, equally important long-term goals (viz., interpersonal success). Instead of focusing solely on the damaging effects of risky behaviors, broadening the purview to include other motives such as interpersonal success can lead to a richer understanding of the reasons people enact them.

Considerations for Future Research. The self-control for personal harm model emphasizes the role of the invisible impulse and self-control process. We echo Hofmann and colleagues' (2008, 2009) call for researchers to measure

proximal impulses and modification processes distinctly, and we add that a complete understanding of the risky behavior process also would consider people's distal motivations for engaging in a behavior. For example, consider the action of having intercourse. Knowing that a person has a strong impulse to be sexual because she or he enjoys it suggests that self-control exertion to be sexual is unnecessary: She or he merely needs to acquiesce to the extant appetitive urge, regardless of the ultimate goal (e.g., social inclusion versus hedonic pleasure). Yet knowing that a person has a strong recoiling reaction toward the thought of having sex, paired with the belief that sex is the way to cement a highly valued relationship, this process is a reversal of the other: To have sex, the person needs to exert self-control. Thus, the same behavior (e.g., having sex) can result from distinct processes. Without considering impulses toward sex and motives for having sex, this vast difference is missed entirely.

How can researchers know whether or not self-control is exerted for risky behaviors? One key element in testing the self-control for personal harm model is to identify the nature of the incipient impulse toward the risky act. Identifying the impulse is vital to the argument that self-control is the process being used; if people are attracted to the risky act, we do not expect that self-control will be needed to enact it.

Generally, user status might be a useful way to differentiate people who are attracted to the act (e.g., regular alcohol drinkers) from people who have an impulse to avoid it (e.g., abstainers). Explicit attitudes toward the risky act might also capture incipient impulses, but implicit measures may better avoid potential response biases when discussing risky acts. In any case, these individual differences could be used to predict whether people later use self-control to enact the behavior. We expect that people with strong aversions toward the act who later go on to engage in it would exert self-control in the process of doing so.

One way that researchers could measure social (and other) motives for engaging in risky acts is with Cooper's (1994) scale. Originally developed for alcohol consumption, it has been applied to other domains as well (Cooper et al., 1998; B. Jackson et al., 2003). Of particular interest is a factor that assesses the motive to fit in with others (named conformity). Coupled with an assessment of impulse, this scale would provide a powerful and nuanced way to predict the kind of self-control processes people use (i.e., acquiescence to an appetitive impulse or overriding an aversive impulse) with risky acts.

We draw on the limited resource model (Baumeister et al., 1998; Baumeister et al., 2007; Vohs et al., 2005; Vohs & Heatherton, 2000) and related research to recommend some ideal designs to test whether people exert self-control for self-harm in the service of interpersonal gain. The self-control process used in these instances should rely on the same precious resource as any other act of self-control. Thus, we predict that overriding an aversion will deplete resources, leaving people less able to exert self-control immediately

following such exertion. The resulting degree of depletion evinced should be commensurate with the degree of repulsion evident in the original impulse that was overcome. Specifically, overcoming an impulse to engage in a risky act that one absolutely loathes should cause more resource depletion than overcoming an impulse that is only mildly negative (but see research on supertasters, discussed below, for a potential limiting case).

Multiple studies have demonstrated that self-control is more heavily implicated when people make choices to act based on pressure from others and to be liked (i.e., "controlled choices" in SDT parlance; Deci & Ryan, 1985, 1987) than when they make choices based on inner desires (i.e., "autonomous choices" in SDT; Moller, Deci, & Ryan, 2006; Muraven, 2008). By extension, we expect that people who are engaging in risky acts to gain social benefits (or avoid social costs) will be particularly depleted of self-control resources, relative to those people who are engaging in risky acts because they want to do so.

In an alternative experimental design, to the extent that self-control resources are depleted in advance of a self-control for personal harm dilemma, we predict that people would be less able to surmount their aversion to the risky action. What may moderate this effect is how much people desire inclusion with a particular social group or person. Past research has shown that people will overcome self-regulation resource depletion if highly motivated (Muraven & Slessareva, 2003). Therefore, it is possible that people who strongly desire a relationship will be highly motivated to overcome self-regulatory resource depletion and exert the required self-control to surpass their aversion to a risky behavior in the hopes of achieving or improving that relationship. Future research is warranted to test these predictions.

#### Opportunities for Theoretical Impact and Refinement.

Prototype/willingness (P/W) model. A related model is the P/W model, which has been developed to explain the antecedents of risky behaviors among adolescents (Gerrard, Gibbons, Houlihan, Stock, & Pomery, 2008; Gibbons, Gerrard, Blanton, & Russell, 1998). This model primarily emphasizes the idea that much of adolescent risk behavior is opportunistic: Adolescents willingly attempt risky actions if the situation arises but often do not seek out circumstances to perform those actions. In other words, risky actions are "volitional but not intentional" (Gerrard et al., 2008, p. 35). This willingness idea is loosely consistent with our view of the antecedents of risky behavior, yet we suggest further that these actions not only are volitional but also can be forced (i.e., strongly deliberate). Here exposes another distinction between the P/W model and the self-control for personal harm model. In the P/W model, the concept of willingness implies that people at least feel indifferent if not appetitive toward the risky action. To be sure, this attitude is true for some people some of the time. In contrast, the self-control for personal harm model stresses that neither a favorable nor an indifferent attitude toward the risky action need be held for the behavior to occur; even an unfavorable attitude can lead to risky behaviors (in this case, via the use of self-control) if the goal is attractive. Therein lies a third key distinction between our model and the P/W model: The P/W model is mute with respect to the psychological mechanism through which people come to enact the behavior. We offer self-control as the mechanism through which a risky behavior is enacted, which is needed particularly when people hold negative attitudes toward the risky action.

We have emphasized that behaviors may arise through self-control failure or exertion. The nature of the self-control process may be predictable depending on the degree of conflict among attitudes, subjective norms, self-efficacy, and prototypes (from the P/W model perspective). Future research could merge the ideas in this article with the P/W model (and perhaps the theory of planned behavior, on which it is based) for a comprehensive understanding of why (i.e., P/W) and how (i.e., self-control processes) people enact risky behaviors.

When will people subjugate personal well-being for social rewards? It is important to note that we are not proposing that all or even most people would consistently risk their personal health and well-being for the sake of social goals. When would people be most likely to subjugate their personal well-being for social gain? Fully answering this question will involve identifying the relative contributions of a number of variables, most critically including risk assessment and social versus personal goal prioritization. The influence of these two factors could be studied at the chronic or situational levels.

To effectively trade off personal well-being and social success involves some perceptions of the risks involved in pursuing (or failing to pursue) each goal. Subjective perception and misperception of risk will play a role in whether people engage in personally harmful behaviors for social gain. Conceptually, risk perception aligns with the idea of a personal aversion. People likely will feel more aversion to the behavior to the extent that they (mis)perceive it as personally risky. Assessing risk is notoriously difficult and fraught with biases (Haselton & Nettle, 2006). If people do not perceive the behavior in question to be risky (or otherwise aversive), then they may be more likely to pursue it for social reward than if they perceive the behavior to be risky (Harris, Jenkins, & Glaser, 2006). Factors that influence risk assessment should contribute to the likelihood people will subjugate their personal well-being for social gain. To our view, the risk assessment should have implications for the degree to which self-control will be required to engage in the behavior. Perceiving (or misperceiving) an action as low in risk would require less self-control to enact, relative to behaviors that are perceived to be high in risk.

In addition to risk assessment, the extent to which people value social rewards versus personal well-being too should influence whether they will pursue a personally harmful path to social success. In cases when people feel averse to the behavior they perceive as a route to social success, personality traits or situational features that make salient interpersonal relationships should heighten the odds that a social goal will be pursued despite a cost to personal well-being. Conversely, personality traits or situational features that make salient the personal self should decrease the likelihood of sacrificing personal well-being to pursue social ends. For example, people with independent self-construals tend to pursue goals for intrinsic reasons, whereas people with interdependent self-construals tend to pursue goals derived from external standards (Downie, Koestner, Horberg, & Haga, 2006). Coupled with the tendency to place great value on interpersonal relationships (Gardner, Gabriel, & Lee, 1999; Markus & Kitayama, 1991), we predict that people with robust interdependent self-construals would be highly likely to sacrifice their personal well-being for the sake of interpersonal relationships.

Age and developmental stage are likely influences of both risk assessment and the value placed on personal versus social well-being. Much of the literature drawn on as evidence in this article examined adolescents. Adolescence may be a time when people are especially likely to override aversive impulses to gain social success because adolescents generally perceive behaviors to be less risky than do people of other ages (Galvan, Hare, Voss, Glover, & Casey, 2007). Moreover, young people place high value on being a member of a desirable peer group (Gavin & Furman, 1989). We predict that even adults who are averse to risky behaviors might engage in them under some conditions: when they value acceptance by the peer group, the peer group approves of the risky behavior, and the risky behavior appears to be a central route to acceptance. An important step for future research is to examine whether people past early adulthood are relatively more impervious to choosing risky behaviors for social gain.

Individual differences in tolerance for risky or otherwise distasteful behaviors (e.g., sensation seeking; Zuckerman, 2006) may limit who will engage in personally harmful behaviors for social gain, should they perceive this to be an effective strategy. Some people, called supertasters, possess an extremely sensitive sense of taste and especially notice sourness and irritation in foods and beverages (Prescott, Soo, Campbell, & Roberts, 2004). Accordingly, they tend to avoid alcohol (Bartoshuk, Duffy, & Miller, 1994; Duffy, Peterson, & Bartoshuk, 2004) and are relatively unlikely to develop nicotine dependence (Snedecor, Pomerleau, Mehringer, Ninowski, & Pomerleau, 2006; Enoch, Harris, & Goldman, 2001). One early study compared supertasters' and nontasters' private and public ratings of a noxious taste (Kelley & Lamb,

1957). Consistent with our suggestions, nontasters altered their taste ratings such that their public ratings conformed to a social group's ratings that the taste was actually pleasant. Supertasters, however, did not alter their ratings to fit with those of the group. This study underscores a potential limiting condition of our model, specifically with respect to degree of aversion toward the behavior under consideration.

Does subjugating personal well-being work to produce interpersonal success? We have shown that engaging in risky behaviors stems at least in part from a desire to foster interpersonal relationships; the extent to which such behaviors succeed at this quest is an opportunity for future research to examine. For people to subjugate their well-being for social gain, they need simply to expect this strategy to work. Nonetheless, there might be some veracity to this belief: Evidence suggests that engaging in some risky behaviors such as behaving sexually (Prinstein et al., 2003), binge eating (Crandall, 1988), and smoking (Aloise-Young et al., 1994) boosts popularity among adolescents. It is reasonable to surmise that for people to repeatedly attempt to engage in risky and potentially costly behaviors, subjugating one's individual well-being might at least some of the time yield social benefits.

As is the case for all acts of self-regulation, the costs are fairly certain but the benefits are delayed and uncertain. People are willing to accept short-term costs to achieve potential long-term benefits when the latter are made salient (Trope & Fishbach, 2000). In the same way, vandalizing property or taking drugs are present-moment actions that may or may not work to enhance social inclusion. Anticipating receipt of imminent and possibly future social success could impel someone to override aversion toward a risky behavior and suffer the immediate personal costs. We are not claiming that these actions always work, but people's intent and hope is that they will. Self-regulation is in the intention, after all, not the outcome.

#### Conclusion

The self-control for personal harm model exposes a new way of looking at self-control in the context of risky behaviors. We highlighted the importance of considering idiosyncratic aversions to, versus appetites for, risky behaviors when specifying whether a behavior stems from exertion of self-control: Regardless of how impulsive it may appear, self-control resides within the actor not the act.

Diverse findings from social, health, clinical, and developmental psychological literatures converge to make clear that people can and do exert self-control to engage in personally harmful behaviors with the hopes of achieving social goals. As a result, this model illuminates a phenomenon currently eclipsed in the literature: People override self-protection impulses to fit in with others.

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#### **Notes**

- We acknowledge that interpersonal relationship success is a goal that benefits the self; however, we draw a conceptual line between intrapersonally beneficial and interpersonally beneficial goals (cf. Vohs & Finkel, 2006).
- 2. We focused our review on social goals for reasons mentioned earlier. Nonetheless, our model also would predict that self-control might be used to engage in risky acts that would be expected, for instance, to help one achieve a positive emotional state or avoid a negative emotional state. Self-control will be used to attain these nonsocial motives (Cox & Klinger, 1988) to the extent that a person dislikes the risky act perceived to be effective in reaching them.
- 3. In September 2009, a ban on flavored tobacco went into effect in the United States in an effort by the Federal Drug Administration to curb smoking. The U.S. Congress concluded that flavoring tobacco to taste like spice, cinnamon, vanilla, chocolate, clove, strawberry, grape, or cherry made it too appealing to children and teens. With such appealing additions, would-be smokers were able to perform the behavior of smoking without having to (in our words) exert the self-control needed to prevail over the otherwise ill taste of unflavored tobacco.

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